# Prescribed Fire: Benefits for wildlife

Using fire to provide long-term, ecosystem benefits...



#### Short term losses versus long term gains



## Game versus non-game...need to shift focus to ecosystems



### Many plant/animal communities evolved with fire...

- A naturally occurring habitat disturbance
- Frequency depended on weather patterns, soils, vegetative structure, etc.
- Some habitats are fire dependent, some fire adapted
- Used by Indians for many purposes
- Other things like grazing animals interacted with fire effects to produce highly diverse, robust ecosystems



#### Bison...Mother Nature's disk...



### Picture 25,000 buffalo grazing...





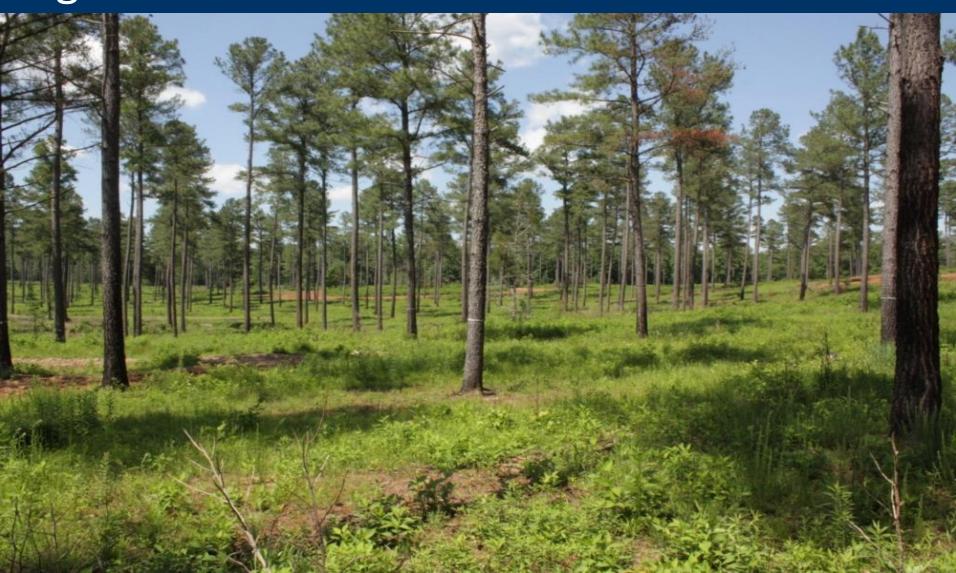


## General benefits to wildlife are through plant species and plant structure...

- Tends to reduce woody stems and increase herbaceous plants
- Scarifies seeds and stimulates germination
- Has some fertilization effects
- Improves nutritional value of some plants
- Increases palatability of herbaceous vegetation
- Removes duff layer exposes some bare soil
- Improves plant structure keeps food and cover down where it is needed



## Reducing woody stems...why is this good?



Scarifying seeds and encouraging herbaceous growth...



Removes duff layer and exposes some



### Habitat structure...remember Jurassic Park...???

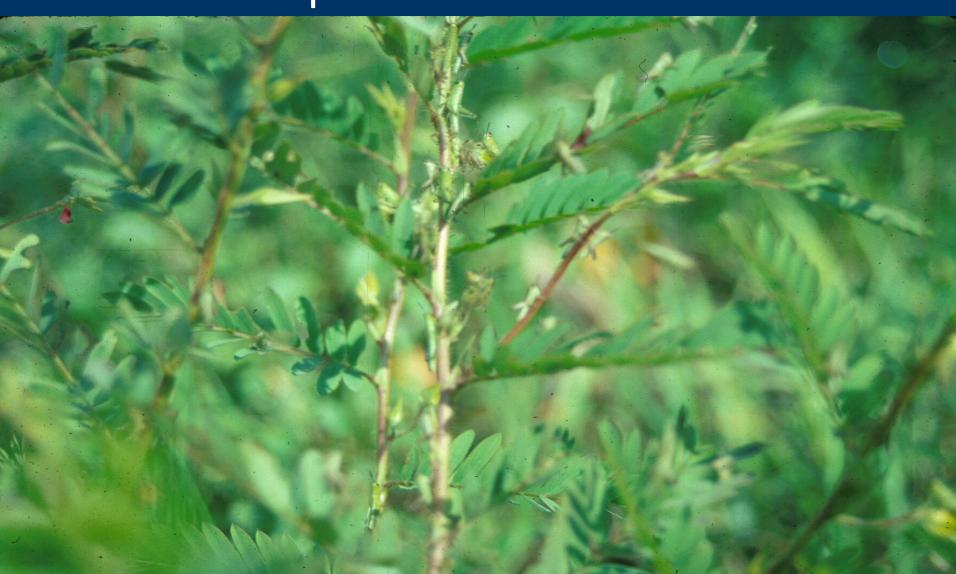
- Need openings and bare ground at ground level...
- But need some cover overhead...
- Things like ragweed, partridge pea, pokeweed, beggar weed – they not only produce an abundance of seeds for fall and winter food, they provide the proper structure
- If you think about the size of organisms using these habitats – it compares in scale to humans walking through an open understory oak woodland



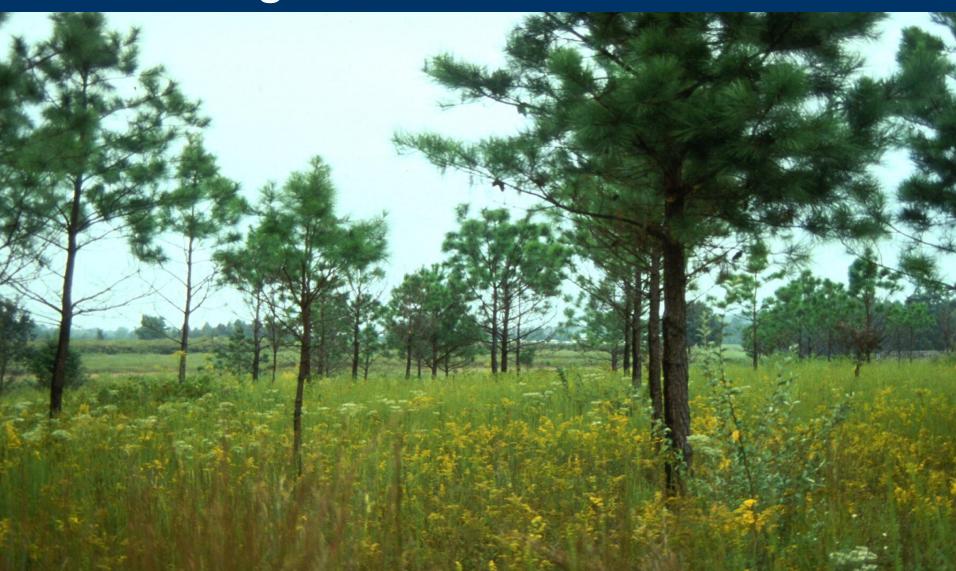
#### Get down to chick's eye view...



## And what do good, succulent, herbaceous plants attract...??



## But not all species need exactly the same thing...





### Where fire can be effectively applied for wildlife

- Open fields / old fields for maintenance
- In field situations to aid in fescue / exotic grass control (increases herbicide effectiveness and seeding)
- Timber site preparation burning
- Thinned pine stands (long-leaf, even sooner)
- Thinned hardwood stands, particularly white oaks
- Shelterwood harvest areas

















## Burn timing...case by case, based on goals...

- With all this there is the "cookbook", then there is reality, so... GO LOOK AT IT...then decide...
- Basically cool season or winter burns, safest, have some effects, reduces fuel loads and prepares for growing season fire
- Growing season fire (late March through late September)
  - More intense
  - Conditions more volatile
  - But best at controlling woody stems and stimulating herbaceous
  - Should not be done by inexperienced burners



## Questions...??? Speak now or go burn yourself up...



